

Work Order ID 79330

Wednesday, January 25, 2012 12:49:18 PM

79330

Feb 3rd Page 1

Item ID: D206-642-611

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Float Skidtube LH

Start Date: 1/24/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/31/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference: REWORK

Approvals: Process Plan: *MF*

Date: *12-01-25* Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

DART		TEL: 1-613-632-3336 FAX: 1-613-632-4443	
TRANSPORT CANADA APPROVAL 409-89			
P/N	D206-642-611	CHG	CHG003
DESC	Float Skidtube LH	STC	SH98-4
LOT	B36951	STC	SA00475SE
MODEL	Bell 206A/B	STC	
US PATENT 6,573,583 CANADA/FOREIGN PATENTS PENDING		MADE IN CANADA	

NR7

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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IIN D206-642	0
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150

150

HandFinish

Hand Finishing

Memo

PULL FROM STOCK D206-642-611 B 36951

CHG003

REMOVE CAP AND WASH LPS3 ENTIRELY OUT OF TUBE PER ECN 09-616

0.00

0.00

12-01-30 ①
for ML5 12-1-31

160

160

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

12-01-31 ①

B79330 D206-642-611

Work Order ID 79330

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Page 2

Wednesday, January 25, 2012 12:49:18 PM

Item ID: D206-642-611

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Float Skidtube LH

Start Date: 1/24/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/31/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference: REWORK

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170		0.00							
170									
HandFinish	Memo	0.00							
Hand Finishing	4-RE-ASSEMBLE I D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive. A/RSikaflex-291 <u>119508</u> Sikaflex expire date: <u>12/08</u>								
180	QC5- Inspect part completeness to step on W/O	0.00							
180									
QC	Memo	0.00							
Quality Control									
190		0.00							
190									
Packaging	Memo	0.00							
Packaging	REMOVE D3672-5 X 16 AND REPLACE WITH D3672-7 X 16 PER DSI 9467 (ECN 09-616)								

As 12 - 1 - 31

12 - 01 - 31

12/1/12

Work Order ID 79330***79330***

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Wednesday, January 25, 2012 12:49:18 PM

Item ID: D206-642-611

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Float Skidtube LH

Start Date: 1/24/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/31/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference: REWORK

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run Start *NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

QC4- 100% Inspect kits for completeness

0.00

200

QC

Memo

0.00

Quality Control

210

Identify as per dwg & Stock Location: 0.00

210

Packaging

Memo

0.00

Packaging

ID AND STOCK UNDER NEW BATCH NUMBER AND NEW CHANGE
NUMBER

ADD NEW PAPERWORK

CHG004

220

QC21- Final Inspection - Work Order Release 0.00

220

QC

Memo

0.00

Quality Control

SP 12-02-01

H/M.L.J. 12/02/01
MF 12-02-01

Picklist Print

Wednesday, January 25, 2012 12:49:18 P

Page 1

Work Order ID: 79330

Parent Item: D206-642-611

Parent Item Name: Float Skidtube LH

Start Date: 1/24/2012

Required Date: 1/31/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B05.10.27Revised pick listKJ/EC
IPP Rev:C 07-12-05 ECN 1080p Rev:L DD verified by:ec
IPP Rev:D 09-01-06 update part list DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D3672-5
Phenolic Washer

Manufactured No

Each 1,864.0000

-16

Location

Loc Qty

Loc Code

ST060

1864

35521

1075

44679

220

50354

569

D3672-7
Phenolic Washer

Manufactured No

Each 1,068.0000

Location

Loc Qty

Loc Code

ST060

1068

73488

68

76279

1000

Qty -041	Part Number	Description
X	D3288-041	SKIDTUBE ASSEMBLY
1	D2600-1-240	EXTRUSION
1	D2646	AFT CAP
1	D2647	CAP
9	D2649	CROSS BOLT SPACER
6	D3275-1	CROSS BOLT SPACER
2	D3286-1	DOUBLER
2	D3286-3	SPACER
1	D3289-041	FLOAT WEB
1	D3413-1	RING
1	D3415-041	NUT PLATE
1	D3535-15	WEARSHOE
1	D3535-21	WEARSHOE
1	D3535-35	WEARSHOE
1	D3535-41	WEARSHOE
1	D3536-15	GASKET
1	D3536-21	GASKET
1	D3536-35	GASKET
1	D3536-41	GASKET
7	D3537-1	WEARPAD
1	D3537-3	WEARPAD
12	D3683-1	INSERT
64	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
66	AN3C4A	BOLT
1	AN4C5A	BOLT
1	AN960C416	WASHER
78	AN960C10L	WASHER
2	CCR264SS3-3	RIVET
2	CR3212-4-03	RIVET
52	CR3212-4-04	RIVET
12	MS27039C1-05	SCREW (or AN3C3A BOLT)
2	NAS1515H3L	WASHER

GENERAL NOTES:

1. MATERIAL: N/A
2. FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
3. TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4. UNITS: INCHES UNLESS OTHERWISE NOTED
5. BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6. IDENTIFICATION: NONE
7. WEIGHT: 20.8 LBS
8. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
9. BOND D3289-041 FLOAT WEB INTO D3288-1 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
10. ALL HOLES DRILLED ON CENTERLINES EXCEPT WHERE SHOWN
11. DRILL Ø0.297 HOLES FOR D3683-1 INSERTS BEFORE FINISH. INSTALL D3683-1 INSERTS AFTER FINISH
12. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3288-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291
13. WELDING: PER DART QSI 004
14. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

RELEASED
C9/16/06 AM DU

G	REFORMAT DWG, RMV LPS-3 (ZN B6-3) RMV C'BORE & ADD SECTION K-K (ZN C2-4)	CP	09.06.17
F	SUBSTITUTE FLOAT BAG INSERT W/SPEC CTRL DWG WAS ALS7-1032-130; IS NOW D3683-1	DC	07.11.21
E	MID-FLOAT HOLES WERE MOVED 2.00" FWD AND ROTATED INBOARD AND OUTBOARD BY 17° INSERTS ARE NOW INSTALLED AT THESE LOCATIONS	MB	07.09.14
D	DIMENSIONS ADDED	DC	07.06.04
C	NEW INSERTS, SS WEARSHOES AND GASKETS	PH	06.12.19
B	CHANGE INSERTS	CP	05.03.18
A	NEW ISSUE	CP	04.05.17
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD	
DRAWN	CP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CP	DRAWING NO.	REV. G
MFG. APPR.	CP	D3288	SHEET 1 OF 4
APPROVED	CP	TITLE	SCALE
DE APPR.	CP	SKIDTUBE ASSEMBLY	NTS
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79330

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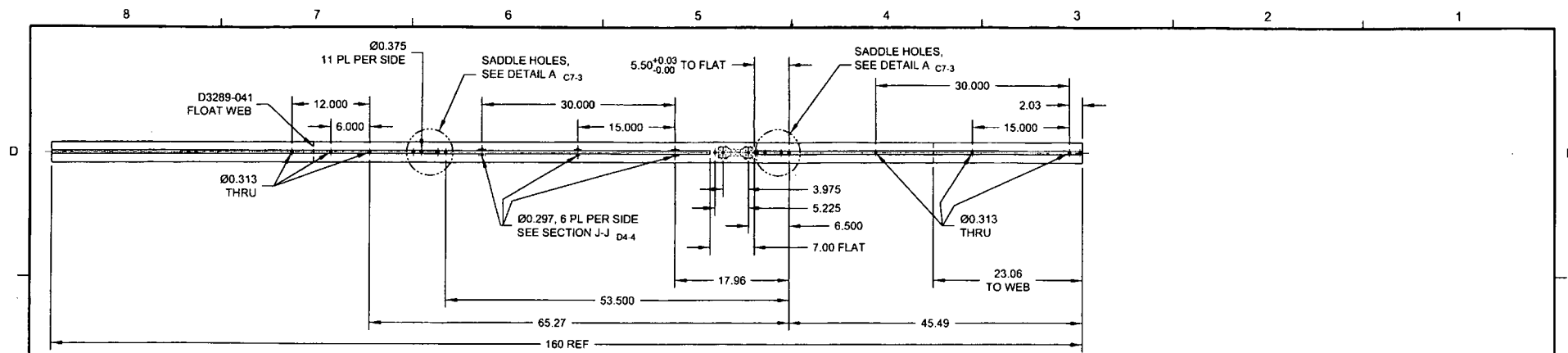
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

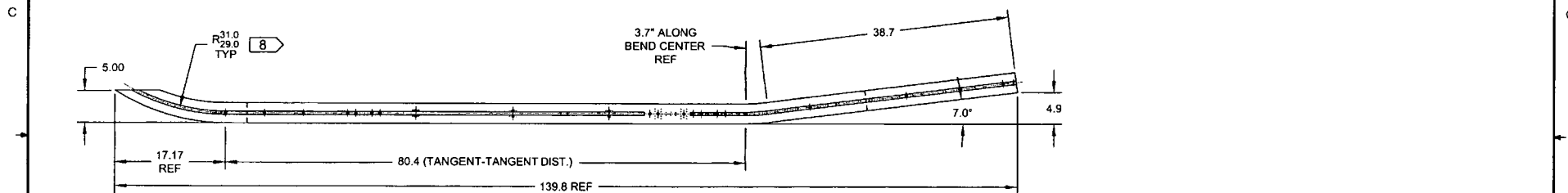
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

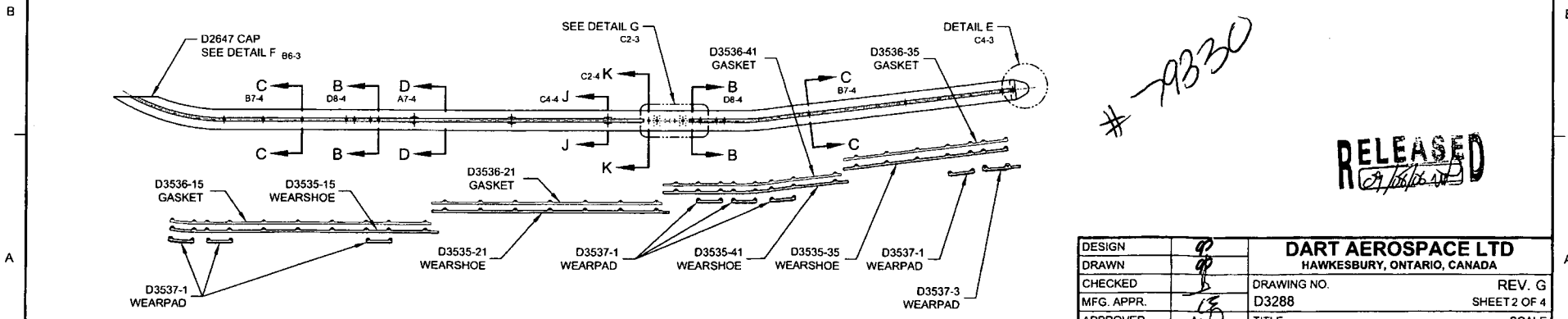
NOTE: Date & initial all entries



D3288-041 DRILLING/WEB ASSEMBLY DETAIL



D3288-041 BENDING DETAIL



D3288-041 WELDING DETAIL/SKIDTUBE ASSEMBLY

DESIGN	90	DART AEROSPACE LTD	
DRAWN	90	HAWKESBURY, ONTARIO, CANADA	
CHECKED	90	DRAWING NO.	REV. G
MFG. APPR.	15	D3288	SHEET 2 OF 4
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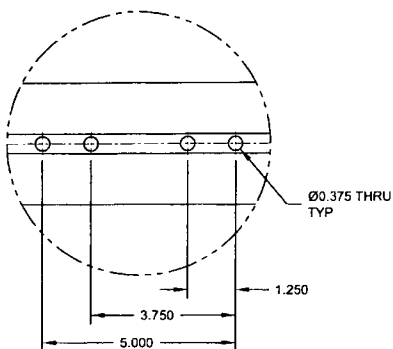
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

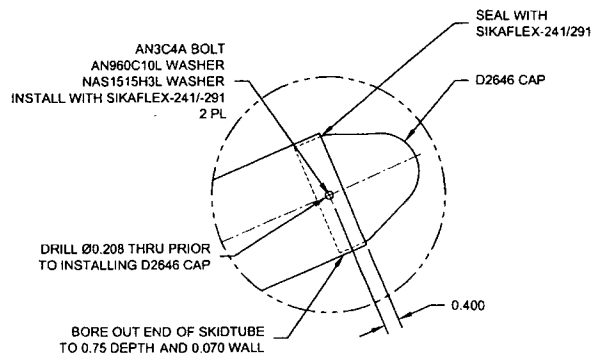
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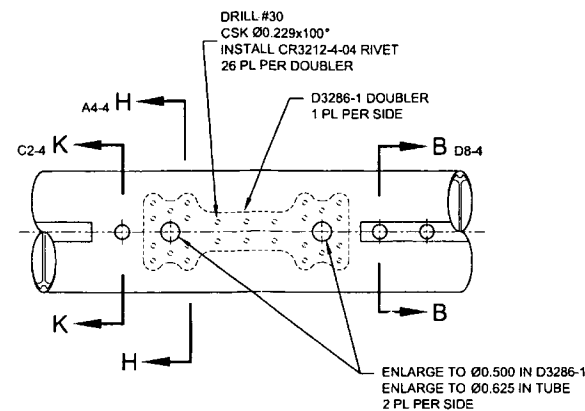
NOTE: Date & initial all entries



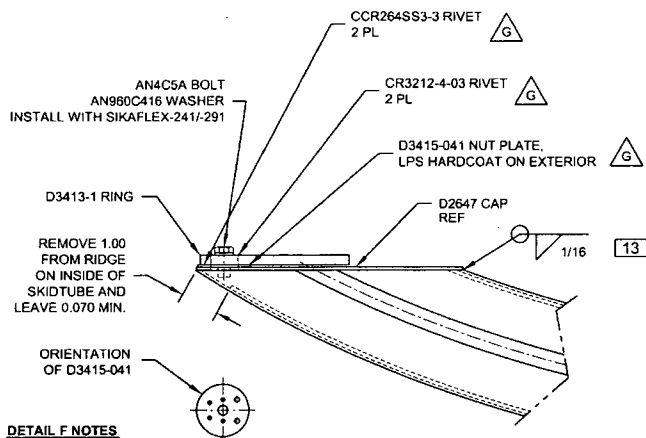
DETAIL A: DRILL DETAIL D6-2, D4-2
SADDLE HOLES, SCALE 5X



DETAIL E B3-2
SCALE 5X



DETAIL G B5-2
SCALE 5X



DETAIL F NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D2647 (TRIM AS NECESSARY)
 4. WELD D2647 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

DETAIL F: END FINISHING DETAIL B7-2
SCALE 5X

79330

RELEASED

DESIGN	99	DART AEROSPACE LTD	
DRAWN	99	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3288	SHEET 3 OF 4
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

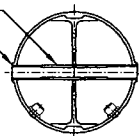
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

D2649 SPACER

13



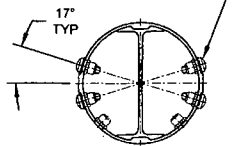
AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR Ø0.375 SADDLE HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE TO Ø0.313x0.75 DEEP

B7-2, B5-2, D1-3

SECTION B-B

FOR Ø0.375 SADDLE HOLES ONLY
8 PL, SCALE 5X

AFTER FINISH, INSTALL D3683-1 INSERT AND PLUG INSERTS USING MS27039C1-05 SCREWS AND AN960C10L WASHERS 12 PL



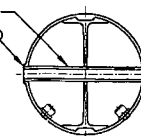
11

SECTION J-J

SCALE 5X D5-2, B6-2

D2649 SPACER

13

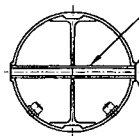


AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR THIS HOLE ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH

B5-2

SECTION K-K

1 PL, SCALE 5X



D3275-1 SPACER

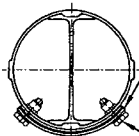
13

CHAMFER 0.030x45° TYP

SECTION C-C

FOR Ø0.313 HOLES ONLY
6 PL, SCALE 5X

B7-2, B4-2



GASKET WEARSHOE WEARPAD REF

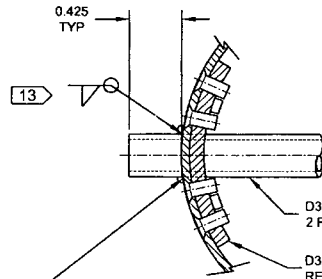
ALS7-1032-130 INSERT AN3C4A BOLT AN960C10L WASHER 64 PL

12

SECTION D-D

FOR WEARSHOES INSTALL ONLY
32 PL, SCALE 5X

B6-2



0.425 TYP

13

D3286-3 SPACER 2 PL

D3286-1 DOUBLER REF

TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
3. ENLARGE HOLES IN D3286-1 TO Ø0.500
4. ENLARGE HOLES IN TUBE TO Ø0.625
5. RIVET D3286-1 TO TUBE
6. INSERT D3286-3 SPACER
7. WELD IN PLACE AND GRIND FLUSH

SECTION H-H

NOT TO SCALE D3-3

79330

RELEASED 09/18/06

DESIGN	91	DART AEROSPACE LTD	
DRAWN	91	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D3288	SHEET 4 OF 4
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DE APPR.		SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

4.9 206A/B HIGH GEAR FLOAT SKIDTUBES, TRI-BAG COMPATIBLE (D206-642)
 32.19 206A/B HIGH GEAR FLOAT SKIDTUBES, TRI-BAG COMPATIBLE (ICA-D206-642)

ITEM	QTY -611	QTY -612	QTY -613	QTY -614	QTY -641	QTY -654	PART NUMBER	DESCRIPTION
	X						D206-642-611	SKIDTUBE INSTALLATION, LH
		X					D206-642-612	SKIDTUBE INSTALLATION, RH
			X				D206-642-613	SKIDTUBE INSTALLATION, LH, THRU BOLT
				X			D206-642-614	SKIDTUBE INSTALLATION, RH, THRU BOLT

IS:

12B	16	16	16	16			D3672-7	WASHER
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WAS:

12B	16	16	16	16			D3672-5	WASHER
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79336

DESIGN	CP	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	CP		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9467	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	WASHER CHANGE	NTS
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries